Eye Protection

Background**: In the past five years, NJPHA-JIF loss history shows 23 eye injuries with loss costs of more thn $85,000. The following are tips to prevent these very preventable injuries. March is **National Eye Wellness Month.

More than 20,000 workers suffer eye injuries each year at work. These injuries vary from the mild to severe and often include loss of vision. OSHA reports that workplace eye injuries cost an estimated $300 million per year in lost productivity, medical treatment and workers compensation.

According to the American Academy of Ophthalmology, an estimated 90 percent of eye injuries are preventable with the use of proper safety eyewear. Even a minor injury to the cornea—like that from a small particle of dust or debris—can be painful and become a life-long issue, so take the extra precaution and always protect the eyes. If the eye is injured, seek emergency medical help immediately.

The best ways to prevent injury to the eye is to always wear the appropriate eye protection. The Bureau of Labor Statistics reports that approximately ***three out of every five workers injured were either not wearing eye protection at the time of the accident or wearing the wrong kind of eye protection for the job.*** To be effective, eyewear must fit properly and be effectively designed to protect the eyes based on the activity being performed. The Occupational Safety Health Administration (OSHA) has standards that require employers to provide their workers with the appropriate eye protection.

According to these standards, you (or anyone who is watching you work) should always wear properly fitted eye protective gear, such as safety glasses with side protection/shields, when:

- Doing work that may produce particles, slivers, or dust from materials like wood, metal, plastic, cement, and drywall; this includes sweeping and dusting
- Hammering, sanding, grinding, or doing masonry work
- Working with power tools
- Working with chemicals, including common household chemicals like ammonia, oven cleaners, and bleach
- Using a lawnmower, riding mower, or other motorized gardening devices like string trimmers
- Working with wet or powdered cement
- Welding (which requires extra protection like a welding mask or helmet from sparks and UV radiation)
- "Jumping" the battery of a motor vehicle
- Being a bystander to any of the above

Types of Protection

To ensure that workers wear the proper type of protective eyewear, the following list from the National Institute for Occupational Safety and Health provides a starting point:

- **Safety glasses** - Safety glasses with side protection provide minimum protection and are for general working conditions where there may be minor dust, chips or flying particles. Side protection includes side shields and wraparound-style safety glasses.

  Safety glasses should have an anti-fog treatment. Polycarbonate lenses are lightweight and provide the best impact protection, but generally are not as scratch-resistant as glass unless treated with a hard coating. OSHA's eye and face protection standard, 29 CFR 1910.133, requires that eye and face protection be American National Standards Institute (ANSI) Z87.1-certified. Look for the ANSI Z87.1 mark on the lens or frame.

- **Goggles -** Goggles provide higher impact, dust and chemical splash protection than safety glasses. Goggles for splash or fine dust protection should have indirect venting. Use direct-vented goggles for less fogging when working with large particles. Safety goggles designed after ski-type goggles with high air flow minimize fogging while providing better particle and splash protection than glasses.

Safety glass users should graduate to goggles when there is more than occasional particle hazards, such as when cutting wood. The assessment, in many cases, comes down to the severity of the hazard.

- **Hybrid safety glasses or goggles**. Safety glasses with foam or rubber around the lenses provide better protection from dust and flying particles than conventional safety glasses. Wraparound safety glasses that convert to goggles with a soft plastic or rubber face seal may offer better peripheral vision than conventional goggles. Avoid hybrids or wraparounds when more impact protection is needed than safety glasses provide. In those cases, use goggles.

- **Prescription safety glasses-** Workers who wear nonsafety prescription glasses should wear tight-fitting goggles over the glasses. Because contact lenses may present a significant corneal abrasion risk when working in dusty areas, contact lens wearers should wear unvented goggles. Wear goggles over prescription safety glasses in high-dust environments. If worn alone, prescription safety glasses should have side protection.

  Prescription safety lenses with tempered glass or acrylic plastic lenses are not suitable for high impact. Do not use these types of safety glasses when working in debris areas unless covered by goggles or a face shield. Use polycarbonate lenses when working in high-impact areas.

- **Face shields -** When protecting the eyes, don't forget to guard against injuries to the face. For highest impact protection, face shields protect the full face from spraying, chipping, grinding and critical chemicals or bloodborne hazards. Never wear face shields, which provide secondary protection, without primary eye protection (safety glasses or goggles). Wear safety glasses or goggles under face shields to provide protection when the shield is lifted. Primary protection helps prevent particles that get under the shield from lodging in the eyes.

- **Specialty protection -** Use other types of protection, such as filtered helmets or goggles, for tasks such as welding or working with lasers. Lenses for welding light protection must be marked with an appropriate "shade number" for the task. Remember to protect the eyes even when the helmet is lifted. Welder's helpers, other workers and bystanders should have welding light protection when near torch cutting or welding. Use ANSI Z136-certified eye protection for laser light hazards.

Ensure a Proper Fit

Safety glasses should rest firmly on top of the nose and close to, but not against, the face. The nose piece should not slide down the face due to sweat or moisture. If the glass slides down even a small amount, the user will lose some protection.

Safety glasses have a three-point fit, meaning the frame should touch the face in three places - at the nose bridge and behind each ear. Temples should wrap around the head, with slight pressure behind the ear, not above the ear.

Protective eyewear works best when employees know how to use it properly. Employers should ensure proper training for employees. Combined with machine guards, screened or divided work stations, and other engineering controls, using the correct protective eyewear can help keep workers safe from any type of eye hazard.

Don't Forget To:
•Brush, shake or vacuum dust and debris from hard hats, hair, the forehead or the top of the eye protection before removing the protector.
•Avoid rubbing eyes with dirty hands or clothing.
•Clean eyewear regularly and ensure the protector is in good condition.
•Ensure eye protection fits properly and will stay in place.

For more information, contact your risk management consultant, or NJPHA-JIF safety director, Jim Rhoads at 610-937-2694 or by e-mail at james_rhoads@pmagroup.com.

SALT/SWEEP LOG

Property:_____
(Name of location)

To be completed as needed during/following snow, sleet, or other conditions that may affect walking surfaces

Date d/m/y	Time Started	Time Completed	Weather Conditions	Specific Area of Attention	Type of Work performed (shovel, sweep, salt)	Name of Person or crew completing work	General comments on conditions,

***Comments should focus on condition of premises after snow removal, also on complaints, accidents, or unusual circumstances.**

Signature:_____

Date signed:_____